

NGDA Dataset Report

Official NGDA Title: Soil Survey Geographic Database (SSURGO)

Metadata Record Title: Soil Survey Geographic Database (SSURGO)

A-16 NGDA Theme: Soils

Executive NGDA Theme Champion(s):

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Metadata:

Registration Status: Complete

Registered on

GeoPlatform Link*: <https://www.geoplatform.gov/node/243/590d6c88-f00c-411e-8c80-3e93476bfb49>

Data.gov Metadata Link*: <http://catalog.data.gov/harvest/object/62f45b2b-dff8-48bc-ab03-1dc40e4a59b9/html>

*If the metadata has been updated and reharvested after publication of this report, the link may no longer be valid. The dataset may be searched for manually in Data.gov or GeoPlatform.gov.

NGDA Lifecycle Maturity Assessment (LMA) Report

Time Frame:

Baseline assessment responses include historic information from 1900 to the present.

LMA Submission:

Status: Complete

Date: 10/20/2015

Extension Requested: No

LMA Reviewer(s):

Supervisor: Did not review

Theme Lead: David Hoover; David.Hoover@lin.usda.gov

Executive Champion: Did not review

SAOGI*: Did not review

Other: SME Tammy Cheever; Tammy.Cheever@lin.usda.gov

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Attachments:

To get access to any attachments referenced in the report, email the LMA Help Desk at NGDA_LMA_help@fgdc.gov. Please use the subject "Dataset Report Attachment(s)" and indicate the associated official NGDA title.

*Senior Agency Official for Geospatial Information (SAOGI)

Lifecycle Maturity Assessment (LMA) Summary

Overall Maturity:

Optimized; Established

General Questions: 100%

Optimized; Established

Stage 1 - Define/Plan: 100%

Optimized; Established

Stage 2 - Inventory/Evaluate: 100%

Optimized; Established

Stage 3 - Obtain: 100%

Optimized; Established

Stage 4 - Access: 100%

Optimized; Established

Stage 5 - Maintain: 100%

Optimized; Established

Stage 6 - Use/Evaluate: 100%

Optimized; Established

Stage 7 - Archive: 100%

Optimized; Established

NGDA Dataset Maturity Definitions:

How To Calculate Maturity: https://www.geoplatform.gov/sites/default/files/How_to_Calculate_Maturity.pdf

Maturity	Maturity Characteristics for All Lifecycle Stages
Optimized; Established Rank = 5	Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined on a regular basis and resources for addressing both current and future business requirements are available.
Mature; Consistent Rank = 4	Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as authoritative by the primary owner. Dataset is used widely by secondary users actively engaged in sustaining the dataset. Future needs are identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.
Managed; Predictable Rank = 3	Dataset meets a significant number of the business needs of the primary owner and is widely used as an authoritative resource by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.
Transition; Transformation Rank = 2	Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.
Planned; Initial Development Rank = 1	Dataset limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, partnerships are forming to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.
No Activity Rank = no activity	Dataset meets project or local business needs of the primary owner, secondary or additional uses or users were not considered, not recognized as an authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

General Questions for All Stages

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?

Answer: Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business processes, and supports all lifecycle stages.

Justification Comment:

Attachment(s): 0

Funding for the continued maintenance of the soils database is a line item in our agency budget for field personnel as well as database development.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053627

2) Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?

Answer: Process is published as appropriate with respect to sensitivity requirements, process is transparent, published appropriately.

Justification Comment:

Attachment(s): 0

All Personal Identifiable Information (PII) that may be contained in the SSURGO database is screened and filtered from any publicly delivered product. Full transparency is given on all development steps and access to any non-PII data.

3) Are there processes and tools in place so that staff are sufficiently knowledgeable to ensure a continuity of the dataset for all stages of the lifecycle, especially during staffing transitions?

Answer: Processes and tools to ensure dataset continuity are in place and implemented for all lifecycle stages.

Justification Comment:

Attachment(s): 0

SSURGO development and maintenance is monitored by a national management position, a technical staff at the National Soil Survey Center in Nebraska, a development staff at the Information Technology Center in Colorado, and server support at the National Information Technology Center in Missouri. Staff and functional roles and responsibilities are documented in agency policy.

STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

Answer: A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

Justification Comment:

Attachment(s): 0

Annual high level and functional business requirements for SSURGO are developed every year with full public input and technical staff development.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

5) How are partners/stakeholders involved in the requirements collection process?

Answer: A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

Justification Comment:

Attachment(s): 0

Annual meetings of the National Cooperative Soil Survey, a user-based Soils Hotline, and frequent communication with user groups help ensure the identification of partner and stakeholder business needs.

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/partnership/>

6) Is there a quality assurance process for the dataset?

Answer: Quality assurance published as appropriate with respect sensitivity requirements.

Justification Comment:

Attachment(s): 0

Data are not published as part of the Agency authoritative data unless established quality assurance processes are met for both the tabular and spatial components of SSURGO.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

7) Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?

Answer: Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.

Justification Comment:

Attachment(s): 0

There are both agency and departmental checks on potential PII content.

<https://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2007/m07-16.pdf>

<http://www.ocio.usda.gov/about-ocio/policy-and-directives-pd/privacy-office>

8) Are defined data standards used in collecting, processing, and/or rendering the data?

Answer: Standards fully implemented documented and published as appropriate.

Justification Comment:

Attachment(s): 0

A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

There are several agency policy documents that are published and online that detail the standards that SSURGO data is developed and measured by.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

STAGE 2 - Inventory/Evaluate

9) Is there a process for determining if data necessary to meet requirements already exist from other sources (either within or outside the agency) before collecting or acquiring new data?

Answer: Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis.

Justification Comment:

Attachment(s): 0

SSURGO represents soils data that is developed by numerous entities in the National Cooperative Soil Survey. All data is held to the same SSURGO standards, regardless of origin, before it is published as the authoritative data set.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

STAGE 3 - Obtain

10) Is there a process for obtaining data in relation to this dataset?

Answer: Process is fully implemented, reviewed and updated on a regular basis.

Justification Comment:

Attachment(s): 0

Both the Web Soil Survey and the Geospatial Data Gateway are used to distribute SSURGO data and complete metrics are maintained for both data portals.

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

<https://gdg.sc.egov.usda.gov/>

11) Is the metadata in a FGDC endorsed geospatial metadata standard?

Answer: Metadata is available in a format endorsed by the FGDC, it fully describes the dataset and provides all the information required to make the dataset discoverable, accessible, and usable.

Justification Comment:

Attachment(s): 0

SSURGO data has CSDGM compliant metadata and it cataloged on the Geoplatform.gov site as an NGDA dataset.

<http://www.geoplatform.gov/>

12) How complete is the geographic coverage as defined in the requirements for the dataset?

Part 1 Answer: Business requirements for cyclic updates identified and a process is in place.

Part 2 Answer: Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%.

Justification Comment:

Attachment(s): 0

SSURGO data is complete for 92% of CONUS. It is archived in over 3250 county and regional datasets that are each complete unto themselves.

<http://websoilsurvey.sc.egov.usda.gov/DataAvailability/SoilDataAvailabilityMap.pdf>

STAGE 4 - Access

13) Do you have a process for providing users access to the data in an open digital machine readable format?

Answer: User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

Justification Comment:

Attachment(s): 0

User access to SSURGO data is available through the Web Soil Survey where publication quality reports and maps can be generated by defined user Areas of Interest. Individual SSURGO datasets can also be download by users at this site.

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

STAGE 5 - Maintain

14) Is there a maintenance process for updating and storing the dataset?

Answer: Dataset maintenance process is fully implemented and processes are reviewed and periodically updated.

Justification Comment:

Attachment(s): 0

An annual refresh of the authoritative data is conducted every October 1 with the incorporation of any data that has been updated in the year preceding that October 1 date.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

15) Is there an error correction process as part of dataset maintenance?

Answer: Error correction process includes user notification, process reviewed on a recurring basis.

Justification Comment:

Attachment(s): 0

Errors, both tabular and spatial, are identified through quality control processes throughout the year, authorized through a quality assurance process, corrected by a technical staff and update annually or

more frequently if deemed critical.

STAGE 6 - Use/Evaluate

16) Is there a process to determine if the dataset meets user needs?

Answer: Process is fully implemented and repeated on a recurring basis.

Justification Comment:

Attachment(s): 0

While no formal user poll is utilized, the user needs for SSURGO data are evaluated through annual meetings with users and cooperators and through Hotline calls.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951

17) Is there a process to provide users information on how to access and properly use the dataset?

Answer: Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis.

Justification Comment:

Attachment(s): 0

Sufficient documentation is available on line at the Web Soil Survey site and through the public assistance available at the National Soil Survey Center.

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

18) Are the business processes and management practices assessed to meet changing technology?

Answer: Assessment process is fully implemented for taking advantage of changing technology, process is reviewed on a recurring basis.

Justification Comment:

Attachment(s): 0

Yes, new database and server technologies are being continually evaluated for possible use in the SSURGO development and delivery system.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242

STAGE 7 - Archive

19) Is there an archiving process for the dataset?

Answer: Archival and disposition processes are fully implemented.

Justification Comment:

Attachment(s): 0

All SSURGO data is archived through all versions.

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

The dataset is archived in the Soil Data Warehouse and delivered via the Web Soil Survey and Geospatial Data Gateway.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054217